

```
$0.52 0.143 DialUnits File1
$0.52 Estimated cost File1
$0.52 Estimated cost this search
$0.52 Estimated total session cost 0.143 DialUnits
```

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File 410:Dialog Comm.-of-Interest Newsletters 2008 /Mar
(c) 2008 Dialog
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Set Items Description
--- -----
? set hi ;set hi
HIGHLIGHT set on as ''
HIGHLIGHT set on as ''
? begin 5,73,155,399
 10jun08 09:32:56 User208760 Session D2953.2
  $0.00 0.117 DialUnits File410
  $0.00 Estimated cost File410
  $0.08 TELNET
  $0.08 Estimated cost this search
  $0.60 Estimated total session cost 0.261 DialUnits
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SYSTEM:OS - DIALOG OneSearch
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File 5:Biosis Previews(R) 1926-2008/Jun W1
  (c) 2008 The Thomson Corporation
File 73:EMBASE 1974-2008/Jun 05
  (c) 2008 Elsevier B.V.
```

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*File 73: The file will be reprocessed soon and accession numbers
will change.
```

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File 155:MEDLINE(R) 1950-2008/Jun 09
  (c) format only 2008 Dialog
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*File 155: MEDLINE has reloaded. Please see HELP NEWS 155
for details.
```

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File 399:CA SEARCH(R) 1967-2008/UD=14824
  (c) 2008 American Chemical Society
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*File 399: Use is subject to the terms of your user/customer agreement.
IPCR/8 classification codes now searchable as IC=. See HELP NEWSIPCR.
```

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Set Items Description
--- -----
? e au=heath andrew ?
```

```
Ref Items Index-term
E1      14 AU=HEATH AMY T
E2      31 AU=HEATH ANDREW
E3      0 *AU=HEATH ANDREW ?
E4      264 AU=HEATH ANDREW C
E5      1 AU=HEATH ANDREW J
E6      3 AU=HEATH ANDREW S
E7      49 AU=HEATH ANDREW W
E8      1 AU=HEATH ANDREW WILLIAM
E9      1 AU=HEATH ANDY
E10     1 AU=HEATH ANNA
E11     1 AU=HEATH ANNE K
E12     16 AU=HEATH ANNE-LOUISE M
```

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Enter P or PAGE for more
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? s e2-e8
            31 AU=HEATH ANDREW
            0 AU=HEATH ANDREW ?
264 AU=HEATH ANDREW C
            1 AU=HEATH ANDREW J
```

3 AU=HEATH ANDREW S
49 AU=HEATH ANDREW W
1 AU=HEATH ANDREW WILLIAM
S1 349 E2-E8
? e au=laing peter ?

Ref Items Index-term
E1 2 AU=LAING PAUL M
E2 13 AU=LAING PETER
E3 0 *AU=LAING PETER ?
E4 92 AU=LAING R
E5 136 AU=LAING R A
E6 47 AU=LAING R B
E7 32 AU=LAING R B S
E8 15 AU=LAING R D
E9 1 AU=LAING R G
E10 1 AU=LAING R I
E11 26 AU=LAING R J
E12 4 AU=LAING R J C

Enter P or PAGE for more

? s e2
S2 13 AU='LAING PETER'
? s (s1 or s2) and (anti(w)cd40 or cd40) and (conjugat? or vaccin? or adjuvant?)
349 S1
13 S2
2012715 ANTI
34562 CD40
3341 ANTI(W)CD40
34562 CD40
408465 CONJUGAT?
585944 VACCIN?
258889 ADJUVANT?
S3 16 (S1 OR S2) AND (ANTI(W)CD40 OR CD40) AND (CONJUGAT? OR
VACCIN? OR ADJUVANT?)

? rd s3
S4 11 RD S3 (unique items)

? t s4/3/all;
4/3/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

0019909437 BIOSIS NO.: 200700569178
CD40-mediated enhancement of immune responses against three forms of
influenza vaccine
AUTHOR: Hatzifotis Caterina; Heath Andrew W (Reprint)
AUTHOR ADDRESS: Univ Sheffield, Sch Med, Unit Infect and Immun, Beech Hill
Rd, Sheffield S10 2RX, S Yorkshire, UK**UK
AUTHOR E-MAIL ADDRESS: w.heath@shef.ac.uk
JOURNAL: Immunology 122 (1): p98-106 SEP 2007 2007
ITEM IDENTIFIER: doi:10.1111/j.1365-2567.2007.02617.x
ISSN: 0019-2805
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

? t s4/3/all;
4/3/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

19236805 BIOSIS NO.: 200600582200
Antibodies against cell surface antigens as very potent immunological
adjuvants
AUTHOR: Barr Tom; Carrington Jennifer; Hatzifotis Caterina; Heath Andrew
W (Reprint)
AUTHOR ADDRESS: Univ Sheffield, Sch Med, Unit Infect and Immun, Beech Hill
Rd, Sheffield S10 2RX, S Yorkshire, UK**UK
AUTHOR E-MAIL ADDRESS: a.w.heath@f.ac.uk
JOURNAL: Vaccine 24 (Suppl. 2): pS20-S21 APR 12 2006 2006
ISSN: 0264-410X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

19091368 BIOSIS NO.: 200600436763
Co-stimulatory agonists as immunological adjuvants
AUTHOR: Barr Tom A; Carrington Jennifer; Heath Andrew W (Reprint)
AUTHOR ADDRESS: Univ Sheffield, Sch Med, Div Genom Med, Acad Unit Infect
and Immun, Beech Hill Rd, Sheffield S10 2RX, S Yorkshire, UK**UK
AUTHOR E-MAIL ADDRESS: tom.barr@ed.ac.uk; j.u.carling-wright@shf.ac.uk;
a.w.heath@sheffield.ac.uk
JOURNAL: Vaccine 24 (17): p3399-3407 APR 24 2006 2006
ISSN: 0264-410X
DOCUMENT TYPE: Article; Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

4/3/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

18411710 BIOSIS NO.: 200510106210
CD40 antibody as a potent immunological adjuvant: CD40
antibody provides the CD40 signal to B cells, but does not
substitute for T cell help in responses to TD antigens
AUTHOR: Barr Tom A (Reprint); Carling Jennifer; Heath Andrew W
AUTHOR ADDRESS: Univ Edinburgh, IIR, Kings Bldg, W Mains Rd, Edinburgh EH9
3JT, Midlothian, UK**UK
AUTHOR E-MAIL ADDRESS: a.w.heath@shf.ac.uk
JOURNAL: Vaccine 23 (26): p3477-3482 MAY 16 05 2005
ISSN: 0264-410X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

17352216 BIOSIS NO.: 200300309705
A potent ***adjuvant*** effect of ***CD40*** antibody attached to antigen.
AUTHOR: Barr Tom A; McCormick Adele L; Carling Jennifer; Heath Andrew
W (Reprint)

AUTHOR ADDRESS: Division of Genomic Medicine, Academic Unit of Infection and Immunity, Medical School, University of Sheffield, Beech Hill Road, Sheffield, S10 2RX, UK**UK
AUTHOR E-MAIL ADDRESS: A.W.Heath@Shef.ac.uk
JOURNAL: Immunology 109 (1): p87-92 May 2003 2003
MEDIUM: print
ISSN: 0019-2805
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

16040098 BIOSIS NO.: 200100211937
Stimulation of dendritic cells via CD40 enhances immune responses to *Mycobacterium tuberculosis* infection
AUTHOR: Demangel Caroline; Palendira Umainainthan; Feng Carl G; Heath Andrew W; Bean Andrew G D; Britton Warwick J (Reprint)
AUTHOR ADDRESS: Centenary Institute of Cancer Medicine and Cell Biology, Newtown, NSW, 2042, Australia**Australia
JOURNAL: Infection and Immunity 69 (4): p2456-2461 April, 2001 2001
MEDIUM: print
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

14284683 BIOSIS NO.: 199800078930
Enhancement of T cell-independent immune responses in vivo by CD40 antibodies
AUTHOR: Dullforce Per (Reprint); Sutton Debbie C; Heath Andrew W
AUTHOR ADDRESS: Div. Molecular Genetic Med., Univ. Sheffield Med. Sch., Beech Hill Road, Sheffield S10 2RX, UK**UK
JOURNAL: Nature Medicine 4 (1): p88-91 Jan., 1998 1998
MEDIUM: print
ISSN: 1078-8956
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/8 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2008 Dialog. All rts. reserv.

26846542 PMID: 18523585
Liposomal co-entrapment of CD40mAb induces enhanced IgG responses against bacterial polysaccharide and protein.
Hatzifoti Caterina; Bacon Andrew; Marriott Helen; Laing Peter;
Heath Andrew W
Adjuvantix Ltd, Sheffield, United Kingdom.
PLOS ONE (United States) 2008, 3 (6) pe2368, ISSN 1932-6203--
Electronic Journal Code: 101285081;

Contract/Grant No.: United Kingdom Biotechnology and Biological Sciences Research Council
Publishing Model Electronic
Document type: Journal Article; Research Support, Non-U.S. Gov't
Languages: ENGLISH
Main Citation Owner: NLM
Record type: In Process

4/3/9 (Item 2 from file: 155)
DIALOG(R)File 155: MEDLINE(R)
(c) format only 2008 Dialog. All rts. reserv.

16259995 PMID: 15732532
Adjuvanticity of anti-CD40 in vaccine development.
Carling Jennifer; Barr Tom; Heath Andrew W
University of Sheffield School of Medicine and Biomedical Sciences, Unit of Infection and Immunity, Division of Genomic Medicine, Sheffield, UK.
Current opinion in molecular therapeutics (England) Feb 2005, 7 (1)
p73-7, ISSN 1464-8431--Print Journal Code: 100891485
Publishing Model Print
Document type: Journal Article; Research Support, Non-U.S. Gov't; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

4/3/10 (Item 3 from file: 155)
DIALOG(R)File 155: MEDLINE(R)
(c) format only 2008 Dialog. All rts. reserv.

15916339 PMID: 15308355
CD40 antibody as an adjuvant induces enhanced T cell responses.
Carling Jennifer; Barr Tom A; McCormick Adele L; Heath Andrew W
Infection and Immunity: Division of Genomic Medicine, F Floor, University of Sheffield Medical School, Beech Hill Rd, Sheffield S10 2RX, UK.
Vaccine (Netherlands) Sep 3 2004, 22 (25-26) p3323-8, ISSN 0264-410X--Print Journal Code: 8406899
Publishing Model Print
Document type: Journal Article; Research Support, Non-U.S. Gov't
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

4/3/11 (Item 4 from file: 155)
DIALOG(R)File 155: MEDLINE(R)
(c) format only 2008 Dialog. All rts. reserv.

15062845 PMID: 12594842
Anti-CD28 has a potent adjuvant effect on the antibody response to soluble antigens mediated through CTLA-4 by-pass.
Carling Jennifer; Barr Tom A; Buckle Anne-Marie; Heath Andrew W
Division of Genomic Medicine, University of Sheffield Medical School, Sheffield, GB.
European journal of immunology (Germany) Jan 2003, 33 (1) p135-42,
ISSN 0014-2980--Print Journal Code: 1273201
Publishing Model Print
Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
? s (anti(w)cd40 or cd40) and (conjugat? or vaccin? or adjuvant?)
2012715 ANTI
34562 CD40
3341 ANTI(W)CD40
34562 CD40
408465 CONJUGAT?
585944 VACCIN?
258889 ADJUVANT?
S5 3748 (ANTI(W)CD40 OR CD40) AND (CONJUGAT? OR VACCIN? OR
ADJUVANT?)
? s (anti(w)cd40 or cd40)(20n)(conjugat? or vaccin? or adjuvant?)
2012715 ANTI
34562 CD40
3341 ANTI(W)CD40
34562 CD40
408465 CONJUGAT?
585944 VACCIN?
258889 ADJUVANT?
S6 1515 (ANTI(W)CD40 OR CD40)(20N)(CONJUGAT? OR VACCIN? OR
ADJUVANT?)
? s (anti(w)cd40 or cd40)(20n)(conjugat? or vaccin? or adjuvant?) and (ganglioside
or muc(W)1)
Processing
Processing
2012715 ANTI
34562 CD40
3341 ANTI(W)CD40
34562 CD40
408465 CONJUGAT?
585944 VACCIN?
258889 ADJUVANT?
1515 (ANTI(W)CD40 OR CD40)(20N)((CONJUGAT? OR VACCIN?) OR
ADJUVANT?)
38837 GANGLIOSIDE
4184 MUC
13019670 1
1570 MUC(W)1
S7 15 (ANTI(W)CD40 OR CD40)(20N)(CONJUGAT? OR VACCIN? OR
ADJUVANT?) AND (GANGLIOSIDE OR MUC(W)1)
? rd s7
S8 11 RD S7 (unique items)
? t s8/3/all
8/3/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.
17781412 BIOSIS NO.: 200400148073
An adenoviral vector cancer vaccine that delivers a tumor associated
antigen/CD40-ligand fusion protein to dendritic cells in vivo and
thereby breaks tolerance to tumor associated self antigens.
AUTHOR: Tang Yucheng (Reprint); Zhang Lixin (Reprint); Akbulut Hakan
(Reprint); Litton Phyllis-Jean (Reprint); Deisseroth Albert B (Reprint)
AUTHOR ADDRESS: Genetic Therapy Program, Sidney Kimmel Cancer Center, San
Diego, CA, USA**USA
JOURNAL: Blood 102 (11): p745a November 16, 2003 2003
MEDIUM: print
CONFERENCE/MEETING: 45th Annual Meeting of the American Society of

Hematology San Diego, CA, USA December 06-09, 2003; 20031206
SPONSOR: American Society of Hematology
ISSN: 0006-4971
DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

8/3/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

17721687 BIOSIS NO.: 200400090456
An adenoviral vector cancer vaccine that delivers a tumor-associated antigen/ ***CD40*** -ligand fusion protein to dendritic cells.
AUTHOR: Zhang Lixin; Tang Yucheng; Akbulut Hakan; Zelterman Daniel; Linton Phyllis-Jean; Deisseroth Albert B (Reprint)
AUTHOR ADDRESS: Sidney Kimmel Cancer Center, San Diego, CA, 92121, USA**USA
AUTHOR E-MAIL ADDRESS: adeisseroth@skcc.org
JOURNAL: Proceedings of the National Academy of Sciences of the United States of America 100 (25): p15101-15106 December 9, 2003
MEDIUM: print
ISSN: 0027-8424 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

8/3/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

16270209 BIOSIS NO.: 200100442048
Cholera toxin B subunit as a carrier molecule promotes antigen presentation and increases CD40 and CD86 expression on antigen-presenting cells
AUTHOR: George-Chandy Annie; Eriksson Kristina (Reprint); Lebens Michael; Nordstrom Inger; Schon Emma; Holmgren Jan
AUTHOR ADDRESS: Department of Medical Microbiology and Immunology, Guldhedsgatan 10A, 413 46, Goteborg, Sweden**Sweden
JOURNAL: Infection and Immunity 69 (9): p5716-5725 September, 2001
MEDIUM: print
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

8/3/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2008 The Thomson Corporation. All rts. reserv.

15485652 BIOSIS NO.: 200000203965
Targeted interleukin-2 induced vaccination against melanoma depends on CD4+ T-cell help mediated by CD40/CD154 interaction, but not endogenous IL-2
AUTHOR: Lode Holger N (Reprint); Xiang R; Pertl U; Forster E; Schoenberger S P; Gillies S D; Reisfeld R A
AUTHOR ADDRESS: La Jolla Inst for Allergy and Imm, San Diego, CA, USA**USA
JOURNAL: Proceedings of the American Association for Cancer Research Annual Meeting (41): p111-112 March, 2000 2000
MEDIUM: print

CONFERENCE/MEETING: 91st Annual Meeting of the American Association for Cancer Research. San Francisco, California, USA April 01-05, 2000; 20000401

ISSN: 0197-016X

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation

LANGUAGE: English

8/3/5 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2008 Elsevier B.V. All rts. reserv.

0080818171 EMBASE No: 2005462794

INKT-cell responses to glycolipids

Parekh V.V.; Wilson M.T.; Van Kaer L. // Van Kaer L.

Department of Microbiology and Immunology, Vanderbilt University School of Medicine, Nashville, TN 37232, United States // Department of Microbiology and Immunology, MCN, Vanderbilt University School of Medicine, Nashville, TN 37232, United States

AUTHOR EMAIL: luc.van.kaer@vanderbilt.edu; luc.van.kaer@vanderbilt.edu

CORRESP. AUTHOR: Van Kaer L.

CORRESP. AUTHOR AFFIL: Department of Microbiology and Immunology, MCN, Vanderbilt University School of Medicine, Nashville, TN 37232, United States

CORRESP. AUTHOR EMAIL: luc.van.kaer@vanderbilt.edu

Critical Reviews in Immunology (Crit. Rev. Immunol.) (United States) November 10, 2005, 25/3 (183-213)

CODEN: CCRID ISSN: 10408401

DOI: 10.1615/CritRevImmunol.v25.i3.20

DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract

LANGUAGE: English SUMMARY LANGUAGE: English

NUMBER OF REFERENCES: 207

8/3/6 (Item 2 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2008 Elsevier B.V. All rts. reserv.

0080582089 EMBASE No: 2005226349

Emerging melanoma vaccines

Bystryn J.-C.; Rudolph J.L. // Bystryn J.-C.

New York University School of Medicine, Ronald O. Perleman Department of Dermatology, NYU Cancer Institute, New York, NY, United States // 550 First Avenue, New York, NY 10016, United States

AUTHOR EMAIL: bystryn@nyu.edu; bystryn@nyu.edu

CORRESP. AUTHOR: Bystryn J.-C.

CORRESP. AUTHOR AFFIL: New York University School of Medicine, Ronald O. Perleman Department of Dermatology, NYU Cancer Institute, New York, NY, United States

CORRESP. AUTHOR EMAIL: bystryn@nyu.edu

Expert Opinion on Emerging Drugs (Expert Opin. Emerg. Drugs) (United Kingdom) May 1, 2005, 10/2 (393-402)

CODEN: EOEDA ISSN: 14728214

DOI: 10.1517/14728214.10.2.393

DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract

LANGUAGE: English SUMMARY LANGUAGE: English

NUMBER OF REFERENCES: 30

8/3/7 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2008 Elsevier B.V. All rts. reserv.

0079535180 EMBASE No: 2003241641
Recent progress in tumour vaccine development
Le Poole I.C.; Bommiasamy H.; Kast W.M. // Le Poole I.C. // Kast W.M. //
Le Poole I.C.
Cancer Immunology Program, Cardinal Bernardin Cancer Center, Loyola
University, Chicago, IL, United States // Department of Pathology, Loyola
University, Chicago, IL, United States // Dept. of
Microbiology/Immunology, Loyola University, Chicago, IL, United States //
Oncology Institute, Loyola University Medical Center, 2160 S. 1st Ave.,
Maywood, IL 60153, United States
AUTHOR EMAIL: ilepool@lumc.edu; ilepool@lumc.edu; ilepool@lumc.edu
CORRESP. AUTHOR: Le Poole I.C.
CORRESP. AUTHOR AFFIL: Cancer Immunology Program, Cardinal Bernardin
Cancer Center, Loyola University, Chicago, IL, United States
CORRESP. AUTHOR EMAIL: ilepool@lumc.edu

Expert Opinion on Investigational Drugs (Expert Opin. Invest. Drugs) (United Kingdom) June 1, 2003, 12/6 (971-981)
CODEN: EOIDE ISSN: 13543784
DOI: 10.1517/eoid.12.6.971.21786
DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract
LANGUAGE: English SUMMARY LANGUAGE: English
NUMBER OF REFERENCES: 115

8/3/8 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2008 Elsevier B.V. All rts. reserv.

0079412353 EMBASE No: 2003116660
Cancer vaccines
Singh V.; Kumar S.; Dewan R.; Zachariah S.; Khatri S.; Anand R.
Department of Medicine, Maulana Azad Medical College, New Delhi, India
CORRESP. AUTHOR: Singh V.
CORRESP. AUTHOR AFFIL: Department of Medicine, Maulana Azad Medical
College, New Delhi, India

Journal of Internal Medicine of India (J. Intern. Med. India) (India)
December 1, 2002, 5/4 (196-202)
CODEN: JIMIF ISSN: 09721096
DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract
LANGUAGE: English SUMMARY LANGUAGE: English
NUMBER OF REFERENCES: 26

8/3/9 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2008 Dialog. All rts. reserv.

17491967 PMID: 17118982
Mutants of type II heat-labile enterotoxin LT-IIa with altered
ganglioside -binding activities and diminished toxicity are potent
mucosal adjuvants.

Nawar Hesham F; Arce Sergio; Russell Michael W; Connell Terry D
The Witebsky Center for Microbial Pathogenesis and Immunology, The
Department of Microbiology and Immunology, University at Buffalo, Buffalo,

New York 14214, USA.

Infection and immunity (United States) Feb 2007, 75 (2) p621-33,

ISSN 0019-9567--Print Journal Code: 0246127

Contract/Grant No.: DE013833; DE; United States NIDCR; DE014357; DE; United States NIDCR; DE06746; DE; United States NIDCR

Publishing Model Print-Electronic

Document type: Journal Article; Research Support, N.I.H., Extramural; Research Support, Non-U.S. Gov't

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

8/3/10 (Item 2 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2008 Dialog. All rts. reserv.

13456411 PMID: 10623847

CpG oligonucleotides can prophylactically immunize against Th2-mediated schistosome egg-induced pathology by an IL-12-independent mechanism.

Chiaramonte M G; Hesse M; Cheever A W; Wynn T A

Immunobiology Section, Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD 20892, USA.

Journal of immunology (Baltimore, Md. - 1950) (UNITED STATES) Jan 15 2000, 164 (2) p973-85, ISSN 0022-1767--Print Journal Code: 2985117R

Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

8/3/11 (Item 3 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2008 Dialog. All rts. reserv.

13151217 PMID: 9884349

CD40 stimulation promotes human secondary immunoglobulin responses in HuPBL-SCID chimeras.

Murphy W J; Funakoshi S; Fanslow W C; Rager H C; Taub D D; Longo D L

Laboratory of Leukocyte Biology, Division of Basic Sciences, Frederick, Maryland, 21702-1201, USA. murphyw@nccifcrf.gov

Clinical immunology (Orlando, Fla.) (UNITED STATES) Jan 1999, 90 (1) p22-7, ISSN 1521-6616--Print Journal Code: 100883537

Contract/Grant No.: N01-CO-56000; CO; United States NCI

Publishing Model Print

Document type: Journal Article; Research Support, U.S. Gov't, P.H.S.

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

? t s8//all

8/7/1 (Item 1 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2008 The Thomson Corporation. All rts. reserv.

17781412 BIOSIS NO.: 200400148073

An adenoviral vector cancer vaccine that delivers a tumor associated antigen/CD40-ligand fusion protein to dendritic cells in vivo and thereby breaks tolerance to tumor associated self antigens.

AUTHOR: Tang Yucheng (Reprint); Zhang Lixin (Reprint); Akbulut Hakan (Reprint); Litton Phyllis-Jean (Reprint); Deisseroth Albert B (Reprint)
AUTHOR ADDRESS: Genetic Therapy Program, Sidney Kimmel Cancer Center, San Diego, CA, USA*²USA

JOURNAL: Blood 102 (11): p745a November 16, 2003 2003

MEDIUM: print

CONFERENCE/METING: 45th Annual Meeting of the American Society of Hematology San Diego, CA, USA December 06-09, 2003; 20031206

SPONSOR: American Society of Hematology

ISSN: 0006-4971

DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Our laboratory has developed an *in vivo* vector based method of activating and tumor antigen loading dendritic cells (DCs) for 10 days continuously to generate a T cell dependent systemic immune response against self antigens associated with cancer cells. We have shown that the subcutaneous injection of this vector is capable of breaking the tolerance of the immune response to the self antigens of the cancer cells. This adenoviral vector (Ad), designated Ad-sig-TAA/ecdCD40L, carries a transcription unit encoding the extracellular domain (ecd) of the CD40 ligand (CD40L) linked to tumor associated antigens (TAA), either the self antigen MUC-1 or the foreign viral antigen HPV E7 that were in turn linked to a secretory signal peptide (sig). The TAA/ecdCD40L protein is secreted from the infected cells at the injection site of the vector continuously over a 10-14 day period. We showed that the TAA/ecdCD40L protein binds to DCs near the injection site which then migrate to regional lymph nodes where they activate a CD8+ T cell systemic immune response against TAA positive tumor cells. The first vector studied (Ad-sig-E7/ecdCD40L) carried a transcription unit encoding the ecd of the CD40L linked to E7, that was in turn linked to a secretory signal peptide (sig). ELISPOT, tetramer staining and cytotoxicity assays all showed that subcutaneous injection of the Ad-sig-E7/ecdCD40L vector can increase the level of antigen specific cytotoxic lymphocytes (CTLs) by eliciting a Th-1 response E7 positive TC-1 tumor cells. The subcutaneous injection of Ad-sig-E7/ecdCD40L prevents engraftment of at least 5X10⁵ TC-1 cells in the vector injected animals for up to 12 months. We also demonstrated that the immunization with Ad-sig-E7/ecdCD40L vector leads to the induction of a far more robust TAA-specific CD8+ T cell response than vaccinations with the non-secretable TAA-CD40L transcription unit or the TAA transcription unit or the CD40L transcription unit alone. The second vector studied (Ad-sig-hMUC-1/ecdCD40L) carried a human MUC-1 (hMUC-1)/ecdCD40L transcription unit. The subcutaneous injection of this vector into hMUC-1 transgenic (hMUC-1.Tg) mice, which are anergic to hMUC-1, resulted in the induction of a hMUC-1 specific immune response, which could suppress the growth of the hMUC-1 mouse cancer cells. We were able to show that the level of hMUC-1 specific CD8+ T cells increases in the spleen of the mice vaccinated with the Ad-sig-hMUC-1/ecdCD40L vector. These hMUC-1 specific cytotoxic lymphocytes demonstrated cytolytic activity, the ability to produce interferon gamma, and the ability to proliferate following exposure to the hMUC-1 antigen positive cells. The Ad-sig-hMUC-1/ecdCD40L vector injections induced an antigen specific T cell immune response against cancer cells positive for the hMUC-1 antigen in ***MUC*** - ***1***. Tg mice which are anergic to the hMUC-1 antigen. No other cytokine or immune enhancing treatments were required to induce the T cell immune response to the hMUC-1 positive cancer cells in 100% of the mice tested. These findings suggest that vaccination with the Ad-sig-TAA-ecdCD40L vector can break tolerance to human MUC-1 positive tumor cells in transgenic mice which are anergic to this

antigen. Thus, this vector may be of use for the in vivo immunotherapy of the many neoplasms that over-express the ***MUC*** - ***1*** self antigen.

8/7/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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17721687 BIOSIS NO.: 20040090456
An adenoviral vector cancer vaccine that delivers a tumor-associated antigen/ ***CD40*** -ligand fusion protein to dendritic cells.
AUTHOR: Zhang Lixin; Tang Yucheng; Akbulut Hakan; Zelterman Daniel; Linton Phyllis-Jean; Deisseroth Albert B (Reprint)
AUTHOR ADDRESS: Sidney Kimmel Cancer Center, San Diego, CA, 92121, USA**USA
AUTHOR E-MAIL ADDRESS: adeisseroth@skcc.org
JOURNAL: Proceedings of the National Academy of Sciences of the United States of America 100 (25): p15101-15106 December 9, 2003 2003
MEDIUM: print
ISSN: 0027-8424 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: To develop a method to overcome the anergy that exists in tumor hosts to cancer, we have designed an adenoviral vector for the in vivo activation and tumor antigen loading of dendritic cells. This adenoviral vector encodes a fusion protein composed of an amino-terminal tumor-associated antigen fragment fused to the CD40 ligand (CD40L). Subcutaneous injection of an adenoviral vector encoding a fusion protein of the human papillomavirus E7 foreign antigen linked to the CD40L generates CD8+ T cell-dependent immunoresistance to the growth of the E7-positive syngeneic TC-1 cancer cells in C57BL/6 mice for up to 1 year. We also studied the s.c. injection of a vector carrying the gene for the human ***MUC*** - ***1*** (hMUC-1) self-antigen fused to the CD40L. When this vector was injected into hMUC-1.Tg mice, which are transgenic for the hMUC-1 antigen, the growth of syngeneic hMUC-1-positive LL1/LL2hMUC-1 mouse cancer cells was suppressed in 100% of the injected animals. The hMUC-1.Tg mice are anergic to the hMUC-1 antigen before the injection of the vector. These experimental results show that it is possible to use vector injection to activate a long-lasting cellular immune response against self-antigens in anergic animals. The vector-mediated in vivo activation, and tumor-associated antigen loading of dendritic cells does not require additional cytokine boosting to induce the immune response against the tumor cells. This vector strategy may therefore be of use in the development of immunotherapy for the many carcinomas in which the hMUC-1 antigen is overexpressed.

8/7/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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16270209 BIOSIS NO.: 200100442048
Cholera toxin B subunit as a carrier molecule promotes antigen presentation and increases CD40 and CD86 expression on antigen-presenting cells
AUTHOR: George-Chandy Annie; Eriksson Kristina (Reprint); Lebens Michael; Nordstrom Inger; Schon Emma; Holmgren Jan
AUTHOR ADDRESS: Department of Medical Microbiology and Immunology, Guldhedsgatan 10A, 413 46, Goteborg, Sweden**Sweden
JOURNAL: Infection and Immunity 69 (9): p5716-5725 September, 2001 2001
MEDIUM: print

ISSN: 0019-9567

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Cholera toxin B subunit (CTB) is an efficient mucosal carrier molecule for the generation of mucosal antibody responses and/or induction of systemic T-cell tolerance to linked antigens. CTB binds with high affinity to GM1 ***ganglioside*** cell surface receptors. In this study, we evaluated how conjugation of a peptide or protein antigen to CTB by chemical coupling or genetic fusion influences the T-cell-activating capacity of different antigen-presenting cell (APC) subsets. Using an *in vitro* system in which antigen-pulsed APCs were incubated with antigen-specific, T-cell receptor-transgenic T cells, we found that the dose of antigen required for T-cell activation could be decreased >10,000-fold using CTB-conjugated compared to free antigen. In contrast, no beneficial effects were observed when CTB was simply admixed with antigen. CTB conjugation enhanced the antigen-presenting capacity not only of dendritic cells and B cells but also of macrophages, which expressed low levels of cell surface major histocompatibility complex (MHC) class II and were normally poor activators of naive T cells. Enhanced antigen-presenting activity by CTB-linked antigen resulted in both increased T-cell proliferation and increased interleukin-12 and gamma interferon secretion and was associated with up-regulation of ***CD40*** and CD86 on the APC surface. These results imply that conjugation to CTB dramatically lowers the threshold concentration of antigen required for immune cell activation and also permits low-MHC II-expressing APCs to prime for a specific immune response.

8/7/4 (Item 4 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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15485652 BIOSIS NO.: 200000203965

Targeted interleukin-2 induced vaccination against melanoma depends on CD4+ T-cell help mediated by CD40/CD154 interaction, but not endogenous IL-2

AUTHOR: Lode Holger N (Reprint); Xiang R; Pertl U; Forster E; Schoenberger S P; Gillies S D; Reisfeld R A

AUTHOR ADDRESS: La Jolla Inst for Allergy and Imm, San Diego, CA, USA**USA
JOURNAL: Proceedings of the American Association for Cancer Research Annual Meeting (41): p111-112 March, 2000 2000

MEDIUM: print

CONFERENCE/MEETING: 91st Annual Meeting of the American Association for Cancer Research. San Francisco, California, USA April 01-05, 2000; 20000401

ISSN: 0197-016X

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation

LANGUAGE: English

8/7/5 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

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0080818171 EMBASE No: 2005462794

inNKT-cell responses to glycolipids

Parekh V.V.; Wilson M.T.; Van Kaer L. // Van Kaer L.

Department of Microbiology and Immunology, Vanderbilt University School

of Medicine, Nashville, TN 37232, United States // Department of Microbiology and Immunology, MCN, Vanderbilt University School of Medicine, Nashville, TN 37232, United States
AUTHOR EMAIL: luc.van.kaer@vanderbilt.edu; luc.van.kaer@vanderbilt.edu
CORRESP. AUTHOR: Van Kaer L.
CORRESP. AUTHOR AFFIL: Department of Microbiology and Immunology, MCN, Vanderbilt University School of Medicine, Nashville, TN 37232, United States
CORRESP. AUTHOR EMAIL: luc.van.kaer@vanderbilt.edu

Critical Reviews in Immunology (Crit. Rev. Immunol.) (United States) November 10, 2005, 25/3 (183-213)
CODEN: CCRID ISSN: 10408401
DOI: 10.1615/CritRevImmunol.v25.i3.20
DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract
LANGUAGE: English SUMMARY LANGUAGE: English
NUMBER OF REFERENCES: 207

Invariant natural killer T (iNKT) cells are an unusual group of T lymphocytes that recognize glycolipid antigens presented by the major histocompatibility complex class I-related protein CD1d. Because iNKT cells play a regulatory role in the immune system, they are attractive targets for immunotherapy. The marine-sponge-derived glycolipid alpha-galactosylceramide (alpha-GalCer) potently activates iNKT cells. In vivo administration of alpha-GalCer to mice or humans results in rapid and robust cytokine secretion by iNKT cells, followed by the activation of a variety of cell types of the innate and adaptive immune systems. These potent immunomodulatory activities of alpha-GalCer are being exploited for therapeutic purposes. Preclinical studies in mice have demonstrated that alpha-GalCer and related glycolipids can protect mice against a variety of diseases, including cancer, infections, and several autoimmune and inflammatory conditions. Although alpha-GalCer treatment of mice is associated with unwanted side-effects, it has been proven safe in clinical trials with cancer patients. These studies have raised significant enthusiasm for the development of effective and safe iNKT-cell-based immunotherapies for a variety of human diseases. (c) 2005 by Begell House, Inc.

8/7/6 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
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0080582089 EMBASE No: 2005226349
Emerging melanoma vaccines
Bystryn J.-C.; Rudolph J.L. // Bystryn J.-C.
New York University School of Medicine, Ronald O. Perleman Department of Dermatology, NYU Cancer Institute, New York, NY, United States // 550 First Avenue, New York, NY 10016, United States
AUTHOR EMAIL: bystryn@nyu.edu; bystryn@nyu.edu
CORRESP. AUTHOR: Bystryn J.-C.
CORRESP. AUTHOR AFFIL: New York University School of Medicine, Ronald O. Perleman Department of Dermatology, NYU Cancer Institute, New York, NY, United States
CORRESP. AUTHOR EMAIL: bystryn@nyu.edu

Expert Opinion on Emerging Drugs (Expert Opin. Emerg. Drugs) (United Kingdom) May 1, 2005, 10/2 (393-402)
CODEN: EOEDA ISSN: 14728214
DOI: 10.1517/14728214.10.2.393
DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract

LANGUAGE: English SUMMARY LANGUAGE: English

NUMBER OF REFERENCES: 30

No satisfactory treatment currently exists for melanoma once it has spread beyond its original site. At present, the only PDA-approved treatment for advanced melanoma is IFN-alpha SUB 2b. Vaccines are an experimental therapy intended to stimulate the immune system to react more strongly against patients' own melanoma cells, thereby destroying the tumour or slowing its progression. Unfortunately, the exact tumour antigens that can stimulate an effective tumour-protective response in humans remain unknown. The approach that is increasingly followed to circumvent this problem is to prepare polyvalent vaccines containing a variety of melanoma antigens, as the greater the number of antigens in a vaccine, the greater the chance it will contain the correct antigen(s) to stimulate an antitumour response. Two recent randomised trials suggest that this approach results in vaccines that can be clinically effective. One is a double-blind, placebo-controlled trial of a polyvalent, shed antigen melanoma vaccine developed by Bystryn and licenced to NeoVac; the other is a larger randomised trial of Melacine(R) (Corixa Corp.), a vaccine prepared from the lysate of two melanoma cell lines adjuvanted with Detox(TM), which was developed by Mitchell and commercialised by Corixa. In both cases, tumour progression was delayed in the vaccine-treated patients, although in the latter trial, this was only observed in patients with certain human leukocyte antigen phenotypes. Several other vaccines are currently in Phase III trials, but the results of these trials are still pending. The major issues that need to be addressed are designing more effective melanoma vaccines with a mix of melanoma-associated antigens that can stimulate clinically beneficial antitumour immune responses, and finding an adjuvant that can safely, easily and powerfully boost the frequency and magnitude of these responses. (c) 2005 Ashley Publications Ltd.

8/7/7 (Item 3 from file: 73)

DIALOG(R)File 73:EMBASE

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0079535180 EMBASE No: 2003241641

Recent progress in tumour vaccine development

Le Poole I.C.; Bommissamy H.; Kast W.M. // Le Poole I.C. // Kast W.M. // Le Poole I.C.

Cancer Immunology Program, Cardinal Bernardin Cancer Center, Loyola University, Chicago, IL, United States // Department of Pathology, Loyola University, Chicago, IL, United States // Dept. of Microbiology/Immunology, Loyola University, Chicago, IL, United States // Oncology Institute, Loyola University Medical Center, 2160 S. 1st Ave., Maywood, IL 60153, United States

AUTHOR EMAIL: ilepool@lumc.edu; ilepool@lumc.edu; ilepool@lumc.edu

CORRESP. AUTHOR: Le Poole I.C.

CORRESP. AUTHOR AFFIL: Cancer Immunology Program, Cardinal Bernardin Cancer Center, Loyola University, Chicago, IL, United States

CORRESP. AUTHOR EMAIL: ilepool@lumc.edu

Expert Opinion on Investigational Drugs (Expert Opin. Invest. Drugs) (United Kingdom) June 1, 2003, 12/6 (971-981)

CODEN: EOIDE ISSN: 13543784

DOI: 10.1517/eoid.12.6.971.21786

DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract

LANGUAGE: English SUMMARY LANGUAGE: English

NUMBER OF REFERENCES: 115

Immunotherapy offers an exciting opportunity to treat human cancer. Analysis of tumour-associated antigens is progressing. Assisted by animal

models, such knowledge can be used to design tumour vaccines. By including adjuvants to increase immunogenicity, several tumours previously thought to be non-immunogenic are now considered targets for tumour vaccines. Newly acquired knowledge regarding dendritic cell physiology is incorporated in newly designed vaccines that are currently in Phase I and II trials. Such assessment provides the overall conclusion that tumour vaccines are safe and deserve a more prominent place in the sequel of treatments for human cancer.

8/7/8 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE
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0079412353 EMBASE No: 2003116660
Cancer vaccines
Singh V.; Kumar S.; Dewan R.; Zachariah S.; Khatri S.; Anand R.
Department of Medicine, Maulana Azad Medical College, New Delhi, India
CORRESP. AUTHOR: Singh V.
CORRESP. AUTHOR AFFIL: Department of Medicine, Maulana Azad Medical
College, New Delhi, India

Journal of Internal Medicine of India (J. Intern. Med. India) (India)
December 1, 2002, 5/4 (196-202)
CODEN: JIMIF ISSN: 09721096
DOCUMENT TYPE: Journal; Review RECORD TYPE: Abstract
LANGUAGE: English SUMMARY LANGUAGE: English
NUMBER OF REFERENCES: 26

William Coley opened the door to therapeutic cancer vaccination more than a century ago; since then there has been a relentless drive to develop effective tumor vaccines. Coupled with an explosion of knowledge in genetics, biotechnology, molecular biology and tumor biology, the science of cancer vaccines has developed into an entirely a new discipline for the prevention and treatment of cancer. Cancer vaccines can be either prophylactic or therapeutic. Prophylactic vaccines seek to prevent the development of tumors by eliminating the causative agent. Among the therapeutic vaccines, initially the first generation vaccines based on whole cell preparations or tumor cell oncolysates were tried; later the second generation of vaccines targeting well characterized tumor associated antigens were studied. However the results have been mixed till now with varying effectiveness in different studies. The lack of effectiveness has been mainly attributed to the fact that most of the tumors look like self and bear self-antigens and that they actively anergise the immune system. It is hoped that the use of professional antigen presenting cells like dendritic cells and the use of subunit vaccines, which will focus on tumor specific antigens will surmount these obstacles and help create potent vaccines for prevention and treatment of various cancers.

8/7/9 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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17491967 PMID: 17118982
Mutants of type II heat-labile enterotoxin LT-IIa with altered ganglioside -binding activities and diminished toxicity are potent mucosal adjuvants.

Nawar Hesham F; Arce Sergio; Russell Michael W; Connell Terry D
The Witebsky Center for Microbial Pathogenesis and Immunology, The
Department of Microbiology and Immunology, University at Buffalo, Buffalo,

New York 14214, USA.

Infection and immunity (United States) Feb 2007, 75 (2) p621-33,

ISSN 0019-9567--Print Journal Code: 0246127

Contract/Grant No.: DE013833; DE; United States NIDCR; DE014357; DE; United States NIDCR; DE06746; DE; United States NIDCR

Publishing Model Print-Electronic

Document type: Journal Article; Research Support, N.I.H., Extramural; Research Support, Non-U.S. Gov't

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The structure and function LT-IIa, a type II heat-labile enterotoxin of *Escherichia coli*, are closely related to the structures and functions of cholera toxin and LT-I, the type I heat-labile enterotoxins of *Vibrio cholerae* and enterotoxigenic *Escherichia coli*, respectively. While LT-IIa is a potent systemic and mucosal adjuvant, recent studies demonstrated that mutant LT-IIa(T14I), which exhibits no detectable binding activity as determined by an enzyme-linked immunosorbent assay, with gangliosides GD1b, GD1a, and GM1 is a very poor adjuvant. To evaluate whether other mutant LT-IIa enterotoxins that also exhibit diminished ganglioside-binding activities have greater adjuvant activities, BALB/c mice were immunized by the intranasal route with the surface adhesin protein AgI/II of *Streptococcus* mutants alone or in combination with LT-IIa, LT-IIa(T14S), LT-IIa(T14I), or LT-IIa(T14D). All three mutant enterotoxins potentiated strong mucosal immune responses that were equivalent to the response promulgated by wt LT-IIa. All three mutant enterotoxins augmented the systemic immune responses that correlated with their ganglioside-binding activities. Only LT-IIa and LT-IIa(T14S), however, enhanced expression of major histocompatibility complex class II and the costimulatory molecules CD40, CD80, and CD86 on splenic dendritic cells. LT-IIa(T14I) and LT-IIa(T14D) had extremely diminished toxicities in a mouse Y1 adrenal cell bioassay and reduced abilities to induce the accumulation of intracellular cyclic AMP in a macrophage cell line.

Record Date Created: 20070123

Record Date Completed: 20070308

Date of Electronic Publication: 20061121

8/7/10 (Item 2 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2008 Dialog. All rts. reserv.

13456411 PMID: 10623847

CpG oligonucleotides can prophylactically immunize against Th2-mediated schistosome egg-induced pathology by an IL-12-independent mechanism.

Chiaramonte M G; Hesse M; Cheever A W; Wynn T A

Immunobiology Section, Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD 20892, USA.

Journal of immunology (Baltimore, Md. - 1950) (UNITED STATES) Jan 15 2000, 164 (2) p973-85, ISSN 0022-1767--Print Journal Code: 2985117R

Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Using a *Schistosoma mansoni* egg-induced granuloma model, we examined the ability of CpG oligodeoxynucleotides (ODN) to suppress Th2-type cytokine expression and to prophylactically immunize against Th2-dependent pulmonary pathology. The mechanism was examined by studying Th2 response regulation in cytokine-deficient mice. Surprisingly, our findings revealed several

functions of CpG DNA that were completely IL-12 independent. Most striking was the marked suppression in Th2 cytokine expression and granulomatous inflammation observed in egg/CpG-sensitized IL-12-deficient mice. Immune deviation was not dependent on NK or B cells. However, a role for IL-10, B7.1, and CD40 expression in Th2 response inhibition was suggested. Indeed, CpG ODN up-regulated all three elements in both wild-type and IL-12-deficient mice. The role of IL-10 was demonstrated in mice exhibiting combined deficiencies in IL-12 and IL-10. Here, a marked increase in egg-specific IL-4/IL-5-producing cells confirmed a role for both cytokines in Th2 response inhibition. Nevertheless, the frequency of Th2-producing cells was again reduced by CpG ODN. However, in marked contrast to IL-12-deficient animals, a significant increase in IFN-gamma-producing cells likely explains the reduced Th2 response in IL-10/IL-12-deficient mice. Thus, a novel IL-12-independent type 1-inducing pathway was revealed in the combined absence of IL-12 and IL-10. Together, these data demonstrate 1) that the Th1-promoting activity of CpG DNA is controlled by IL-12 and IL-10, and 2) that Th2 response inhibition by CpG ODN involves IL-12-independent changes in IL-10 and costimulatory molecule expression. These findings illustrate the utility of CpG DNA as adjuvants for vaccines designed to prevent Th2-dependent immunopathology.

Record Date Created: 20000210

Record Date Completed: 20000210

8/7/11 (Item 3 from file: 155)
DIALOG(R)File 155: MEDLINE(R)
(c) format only 2008 Dialog. All rts. reserv.

13151217 PMID: 9884349

CD40 stimulation promotes human secondary immunoglobulin responses in HuPBL-SCID chimeras.

Murphy W J; Funakoshi S; Fanslow W C; Rager H C; Taub D D; Longo D L
Laboratory of Leukocyte Biology, Division of Basic Sciences, Frederick, Maryland, 21702-1201, USA. murphy@nclfcrf.gov

Clinical immunology (Orlando, Fla.) (UNITED STATES) Jan 1999, 90 (1)
p22-7, ISSN 1521-6616--Print Journal Code: 100883537
Contract/Grant No.: N01-CO-56000; CO; United States NCI

Publishing Model Print

Document type: Journal Article; Research Support, U.S. Gov't, P.H.S.

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Antibodies to CD40 have been demonstrated to promote B-cell growth and differentiation in vitro. In order to determine if CD40 stimulation could promote antigen-specific human immunoglobulin (Ig) production in vivo, we examined the effects of anti-human CD40 MoAb in an in vivo system where human peripheral blood lymphocytes (huPBL) were engrafted into mice with severe combined immune deficiency (SCID). The huPBL-SCID mice were then given various doses of diphtheria-tetanus toxoid (DT) vaccine and were examined for the presence of human DT-specific antibodies by ELISA. Surprisingly, treatment with anti-CD40 significantly lowered background DT responses versus untreated chimeras in unimmunized huPBL-SCID mice. However, after immunization, huPBL-SCID mice treated with ***anti*** - CD40 MoAb responded to a significantly greater extent in response to the vaccine compared with control huPBL-SCID mice, although total Ig levels were sometimes lower in ***anti*** - ***CD40*** - treated mice. The predominant Ig isotype induced after immunization was IgG. Thus, CD40 stimulation promotes human secondary IgG responses in huPBL-SCID mice. These data demonstrate that CD40 stimulation is capable of promoting antigen-specific human B-cell responses in vivo. Copyright 1999 Academic Press.

Record Date Created: 19990305
Record Date Completed: 19990305
? s (anti(w)cd40 or cd40)(20n)(conjugat? or vaccin? or adjuvant?) and (valen?)
 2012715 ANTI
 34562 CD40
 3341 ANTI(W)CD40
 34562 CD40
 408465 CONJUGAT?
 585944 VACCIN?
 258889 ADJUVANT?
 1515 (ANTI(W)CD40 OR CD40)(20N) ((CONJUGAT? OR VACCIN?) OR
 ADJUVANT?)
 864411 VALEN?
S9 9 (ANTI(W)CD40 OR CD40)(20N)(CONJUGAT? OR VACCIN? OR
 ADJUVANT?) AND (VALEN?)
? rd s9
 S10 5 RD S9 (unique items)
? t s10/3/alol
>>>'ALOL' not recognized as item list
? t s10/3/all

10/3/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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18914144 BIOSIS NO.: 200600259539
Multimeric soluble CD40 ligand and GITR ligand as adjuvants for
human immunodeficiency virus DNA vaccines
AUTHOR: Stone Geoffrey W; Barzee Suzanne; Snarsky Victoria; Kee Kristin;
Spina Celsa A; Yu Xiao-Fang; Kornbluth Richard S (Reprint)
AUTHOR ADDRESS: Univ Calif San Diego, Dept Med 0679, Stein Clin Sci
Bldg, Room 304, 9500 Gilman Dr, La Jolla, CA 92093 USA**USA
AUTHOR E-MAIL ADDRESS: rkornbluth@ucsd.edu
JOURNAL: Journal of Virology 80 (4): p1762-1772 FEB 2006 2006
ISSN: 0022-538X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

10/3/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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16055747 BIOSIS NO.: 200100227586
Up-regulation of CD40 ligand and induction of a Th2 response in
children immunized with pneumococcal polysaccharide vaccines
AUTHOR: Leiva Lily E (Reprint); Butler Boyd; Hempe James; Ortigas Alejandro
P; Sorensen Ricardo U
AUTHOR ADDRESS: Department of Pediatrics, LSU Health Sciences Center, 1542
Tulane Ave., New Orleans, LA, 70112-2822, USA**USA
JOURNAL: Clinical and Diagnostic Laboratory Immunology 8 (2): p233-240
March, 2001 2001
MEDIUM: print
ISSN: 1071-412X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

10/3/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
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14359529 BIOSIS NO.: 199800153776

Upregulation of CD40 ligand and IL-4 expression by the 23-valent pneumococcal vaccine in children with recurrent infections

AUTHOR: Ortigas A P; Butler B; Leiva L E; Sorensen R U

AUTHOR ADDRESS: LSU Med. Cent., New Orleans, LA, USA**USA

JOURNAL: Journal of Allergy and Clinical Immunology 101 (1 PART 2): pS15
Jan., 1998 1998

MEDIUM: print

CONFERENCE/MEETING: 54th Annual Meeting of the American Academy of Allergy, Asthma and Immunology Washington, DC, USA March 13-18, 1998; 19980313

SPONSOR: American Academy of Allergy, Asthma, and Immunology

ISSN: 0091-6749

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation

LANGUAGE: English

10/3/4 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

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0081018547 EMBASE No: 2006078525

Multimeric soluble CB40 ligand and GITR ligand as adjuvants for human immunodeficiency virus DNA vaccines

Stone G.W.; Barzee S.; Snarsky V.; Kee K.; Kornbluth R.S. // Spina C.A. // Spina C.A. // Yu X.-F. // Kornbluth R.S. // Kee K.
Department of Medicine, University of California San Diego, 9500 Gilman Drive, San Diego, CA 92093-0679, United States // Department of Pathology, University of California San Diego, 9500 Gilman Drive, San Diego, CA 92093-0679, United States // VA San Diego Healthcare System-151, 3350 La Jolla Village Drive, San Diego, CA 92161, United States // John Hopkins Bloomberg School of Public Health, 615 North Wolfe Street, Baltimore, MD 21205, United States // Department of Medicine-0679, Stein Clinical Sciences Bldg., University of California, San Diego, 9500 Gilman Dr., San Diego, CA 92093-0679, United States // Laboratory of Cell Regulation and Carcinogenesis, National Cancer Institute, Bethesda, MD 20892, United States

AUTHOR EMAIL: rkornbluth@ucsd.edu; rkornbluth@ucsd.edu

CORRESP. AUTHOR: Kornbluth R.S.

CORRESP. AUTHOR AFFIL: Department of Medicine-0679, Stein Clinical Sciences Bldg., University of California, San Diego, 9500 Gilman Dr., San Diego, CA 92093-0679, United States

CORRESP. AUTHOR EMAIL: rkornbluth@ucsd.edu

Journal of Virology (J. Virol.) (United States) February 1, 2006, 80/4 (1762-1772)

CODEN: JOVIAX ISSN: 0022538X

DOI: 10.1128/JVI.80.4.1762-1772.2006

DOCUMENT TYPE: Journal; Article RECORD TYPE: Abstract

LANGUAGE: English SUMMARY LANGUAGE: English

NUMBER OF REFERENCES: 97

10/3/5 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

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141052853 CA: 141(4)52853e PATENT

Vaccine comprising an antigen conjugated to low valency anti-CD40 or anti-CD28 antibodies

INVENTOR(AUTHOR): Heath, Andrew; Laing, Peter

LOCATION: UK,

ASSIGNEE: Adjuvantix Limited

PATENT: PCT International ; WO 200452396 A1 DATE: 20040624

APPLICATION: WO 2003GB5389 (20031210) *GB 200228796 (20021211)

PAGES: 31 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATIONS:

CLASS: A61K-039/39A; A61K-039/14B; A61K-039/02B; A61K-039/12B;

A61K-039/005B; A61K-039/015B; A61P-031/00B; C07K-016/28B

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SV; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW; GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

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10/7/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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16055747 BIOSIS NO.: 200100227586

Up-regulation of CD40 ligand and induction of a Th2 response in children immunized with pneumococcal polysaccharide vaccines

AUTHOR: Leiva Lily E (Reprint); Butler Boyd; Hempe James; Ortigas Alejandro P; Sorensen Ricardo U

AUTHOR ADDRESS: Department of Pediatrics, LSU Health Sciences Center, 1542 Tulane Ave., New Orleans, LA, 70112-2822, USA**USA

JOURNAL: Clinical and Diagnostic Laboratory Immunology 8 (2): p233-240 March, 2001 2001

MEDIUM: print

ISSN: 1071-412X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: We wished to determine whether pneumococcal polysaccharide antigens induce mRNA expression of CD40 ligand (CD40L) and Th1 or Th2 cytokines in unimmunized individuals in vitro and whether immunization with the 23-valent pneumococcal polysaccharide vaccine induces changes in CD40L and cytokine mRNA expression. Children with recurrent respiratory infections were studied before and 4 to 6 weeks after receiving the pneumococcal vaccine. One patient who failed to respond to the polysaccharide vaccine subsequently received a single dose of the experimental 7- ***valent*** pneumococcal conjugate vaccine. Unimmunized healthy adults were included as controls. Quantification of mRNA expression of CD40L, interleukin-4 (IL-4), IL-12p40, and gamma interferon (IFN-gamma) was performed by reverse transcription-PCR and enzyme-linked immunosorbent assay (ELISA)-PCR with resting and stimulated peripheral blood mononuclear cells. Serum immunoglobulin G (IgG) anti pneumococcal antibody levels were measured by ELISA. The results showed a significant increase in the expression of mRNAs for CD40L and IL-4, but not IL-12p40 or IFN-gamma, in stimulated cultures from unimmunized individuals. CD40L and IL-4 mRNA expression was significantly higher in postimmunization than in preimmunization samples stimulated with the individual

pneumococcal serotypes. These results suggest that pneumococcal polysaccharide antigens specifically up-regulate CD40L expression and induce a Th2 response in vitro which parallels the increase in IgG antipneumococcal antibody levels in serum.

10/7/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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14359529 BIOSIS NO.: 199800153776
Upregulation of CD40 ligand and IL-4 expression by the 23-valent pneumococcal vaccine in children with recurrent infections
AUTHOR: Ortigas A P; Butler B; Leiva L E; Sorensen R U
AUTHOR ADDRESS: LSU Med. Cent., New Orleans, LA, USA**USA
JOURNAL: Journal of Allergy and Clinical Immunology 101 (1 PART 2): pS15
Jan., 1998 1998
MEDIUM: print
CONFERENCE/MEETING: 54th Annual Meeting of the American Academy of Allergy, Asthma and Immunology Washington, DC, USA March 13-18, 1998; 19980313
SPONSOR: American Academy of Allergy, Asthma, and Immunology
ISSN: 0091-6749
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Citation
LANGUAGE: English
? s (antibod?)(20n)(conjugat? or vaccin? or adjuvant?) and (valen?)
 2327268 ANTIBOD?
 408465 CONJUGAT?
 585944 VACCIN?
 258889 ADJUVANT?
 176536 ANTIBOD?(20N)((CONJUGAT? OR VACCIN?) OR ADJUVANT?)
 86441 VALEN?
S11 1306 (ANTIBOD?)(20N)(CONJUGAT? OR VACCIN? OR ADJUVANT?) AND
 (VALEN?)
? s (antibod?)(20n)(conjugat? or vaccin? or adjuvant?)(20n)(valen?)
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 258889 ADJUVANT?
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S12 1024 (ANTIBOD?)(20N)(CONJUGAT? OR VACCIN? OR
 ADJUVANT?)(20N)(VALEN?)
? s (antibod?)(20n)(conjugat? or vaccin? or adjuvant?)(20n)(valen?)(20n)(low)
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 408465 CONJUGAT?
 585944 VACCIN?
 258889 ADJUVANT?
 86441 VALEN?
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S13 96 (ANTIBOD?)(20N)(CONJUGAT? OR VACCIN? OR
 ADJUVANT?)(20N)(VALEN?)(20N)(LOW)
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 S14 46 RD S13 (unique items)
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